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Contribution areas include:

- Evolution of GSM (GPRS/EDGE/WCDMA) as the global platform to 3G (GSA is a lead sponsor of the EDGE Operators' Forum)
- Quarterly surveys of mobile portals trends, information, analysis
- Global Mobile Dialogue[™] as a forum for interchange of ideas
- Briefings to operators, investors, analysts and media
- Regional seminars for information sharing and dialogue
- Opinion Papers on major industry topics
- New Ventures Program (NVP) supports start-ups in wireless developer industry worldwide
- Bringing consolidated market-related inputs into 3G standardization as a Market Representation Partner in 3GPP



September 25, 2002 - London Topic: **Building New Mobile Revenues With GPRS**



Moderator: Sally Bundock, BBC TV

Summary: www.gsacom.com/news/gsa_127.htm

Future events: Sao Paulo, December 3rd, 2002 Cannes, February 18th, 2003

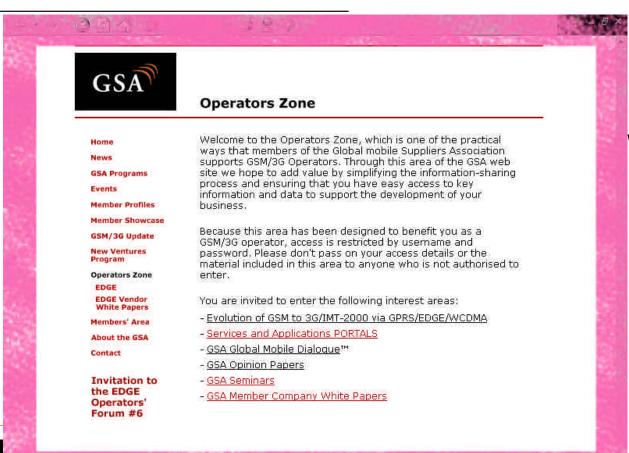


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Operators Zone for GSM/3G Operators





Register now at

www.gsacom.com/opzone



- Summarises current status; quarterly results
- Covers operators and independent portal services providers
- Sponsored by GSA; undertaken by Satama Interactive
 - Q1 Q2 2001 focus was Europe (West and East)
 - Q3 covered North America, Q4 surveyed Latin America
 - Q1 2002 survey covered Asia Pacific region
 - Q2 2002 survey updated European scene
 - Q3 2002 survey updates Asia Pacific region NEW
 - (Q4 2002 will update the Americas)



8 main service categories



Messaging

e.g. e-mail, chat, MMS, picture messaging

Personal Information Management

e.g. calendar, contacts, address books, photo albums

Information

e.g. general, financial and sports news, weather, directories, job listings

Lifestyle

e.g. restaurant and nightlife information, health services, TV and movie information, and dating **Entertainment**

e.g. jokes, horoscopes, quizzes, games gambling, downloads and adult entertainment

M-Commerce

e.g. banking, stock trading, shopping and auctions

Travel

e.g. flight and hotel listings, traffic updates, travel guides and direction assistance

Portal characteristics

e.g. personalisation, location-based services, device optimised





- Mobile penetration rate is high in most of the studied APAC countries
- Mobile usage, especially for data services, has substantial growth capacity in the region - mobile data is expected to fill the gap in decreasing voice service ARPUs
- Japan and South Korea are frontrunners in the mobile evolution
- APAC operators have been first to introduce commercial 3G networks

Asia Pacific mobile portals



- APAC mobile portals mostly have a vast offering of services; some portals boast access to thousands of sites. 3rd party content provisioning common
- Colour screens, good graphical capabilities and functionally advanced handsets enhance quality and richness of services
- Some operators have a separate mobile portal for PDA users
- Compared with their counterparts in Europe, Asian Pacific operators move more aggressively towards 3G
- A main driver on the path to the 3G is camera-equipped phones and picture e-mail services.

perators are also introducing location-based services, or developing existing ones further.

Asia Pacific handsets and technologies



- Packet-based networks with increased data rates are widely introduced
- Mobile operators have influenced handset development towards advanced functionalities, e.g. multimedia, picture-phones
- Operators stress the importance of Java applications and multimedia in generating data revenues
- Acceptance and speed of 3G services development is affected by takeup of 2.5G services



- Continuous focus on information and messaging services and entertainment
- Shopping and banking services are often provided
- Different kinds of travel information are often provided
- Some new service categories introduced, Jobs and Health, shows a considerable supply of these services



Services offered by most mobile portals in every region:

information services, such as general and financial news, sport news and results and weather updates.

Leisure-related services such as restaurant listings and different kinds of entertainment.

Services that are not common in most regions:

auctions, stock trading and location-based services

APAC stands out as offering more m-banking and purchasing services



- Compared with Europe and the Americas, the mobile Internet has been more successful in APAC, with Japan and Korea leading the evolution
- Asian Pacific operators move <u>more aggressively</u> towards 3G
- APAC region is leading the pack in most mobile portal service categories, but differences are mostly not significant
- Most mobile portals do not seem to have any specific target group, and the same services are most common in all regions

Q2 2002 survey: increasing maturity in Europe



- New trends in payment/billing models
 - shift from time-based billing of portals services; GPRS largely volume-based
 - Operator branding a few big names dominating
- Importance of image and segmentation
- Key service categories offered by all in Western Europe
- Downloads (music, adult entertainment) particular popular
- Messaging (MMS, picture messages) offered by almost half portals surveyed
- E. Europe: major growth coming from news, weather, financial information
- E. Europe: significant growth in entertainment services, games, gambling
- Overall, less change in West than East, due to higher saturation of services

Asia Pacific continues to lead world in service maturity; Western Europe is next



Portals Surveys - download and feedback



- See summary tables in Appendix
- Download surveys at www.gsacom.com
- Comments/suggestions to surveyfeedback@gsacom.com





New Report from GSA: *Current State and Outlook of GPRS in Europe*



- To be released in October 2002
- Discusses challenges for GPRS introduction networks, handset, services, billing models, marketing
- Provides examples of initial services over GPRS. Highlights need for successful services to be *feasible*, *viable* and *desirable*
- Four key recommendations relating to:
 - subscriber value proposition
 - simple pricing models
 - pre-configured handset/service packages
 - supporting new service discovery





Appendix Mobile Portals Survey - Q3 2002 Data Tables



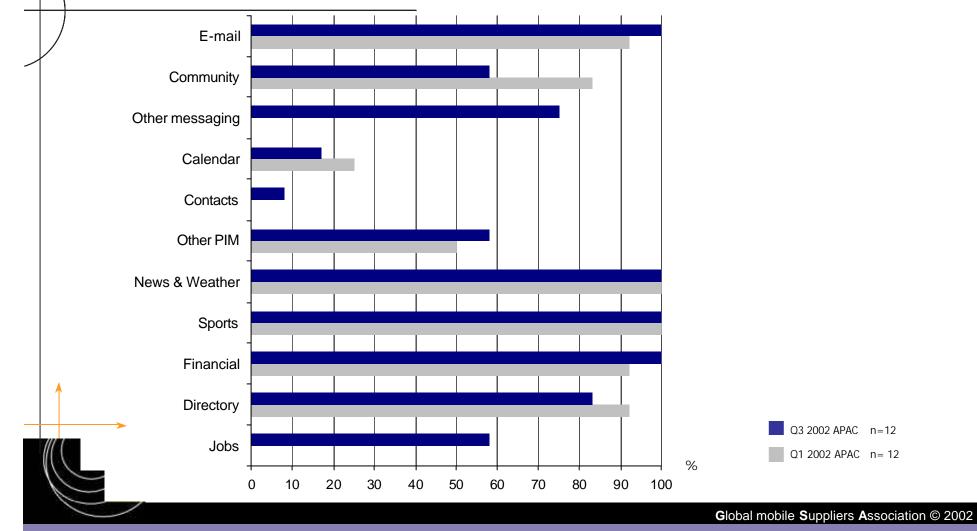
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3-4 October, 2002

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Evolution of Messaging, PIM and Information services APAC; Q1 02 and Q3 02

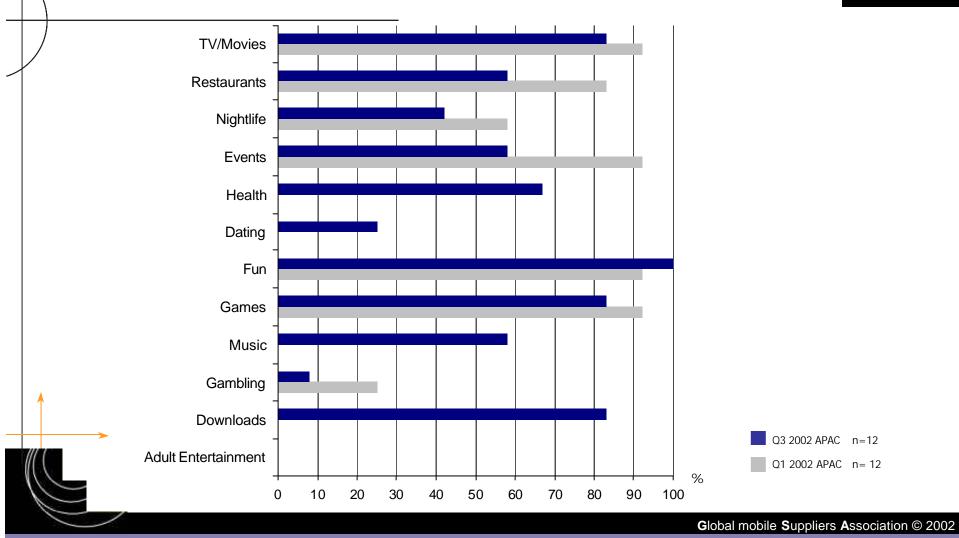




Note: Other messaging and Jobs services were not previously surveyed 3-4 October, 2002

Evolution of Lifestyle and Entertainment services APAC; Q1 02 and Q3 02





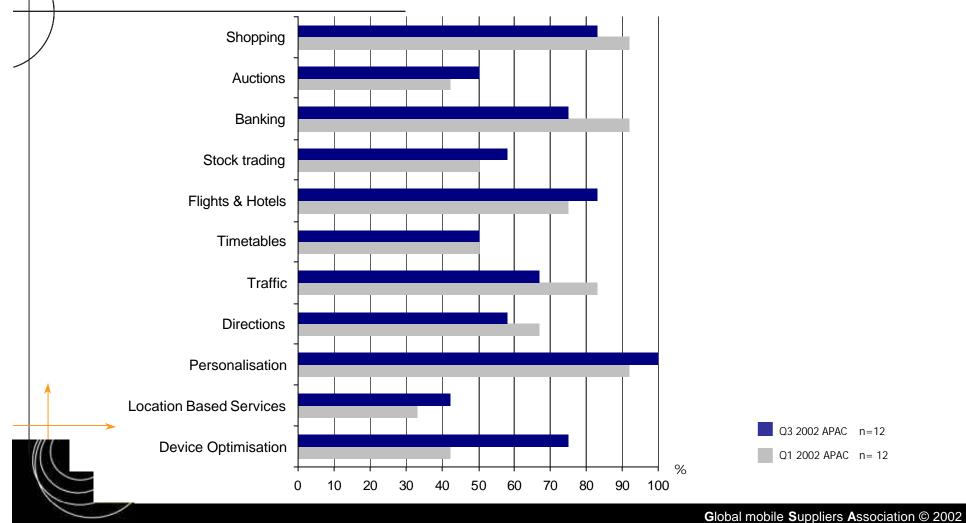
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Note: Health, Dating, Music, Downloads and Adult Entertainment services were not previously surveyed 3-4 October, 2002

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Evolution of M-Commerce and Travel services APAC; Q1 02 and Q3 02

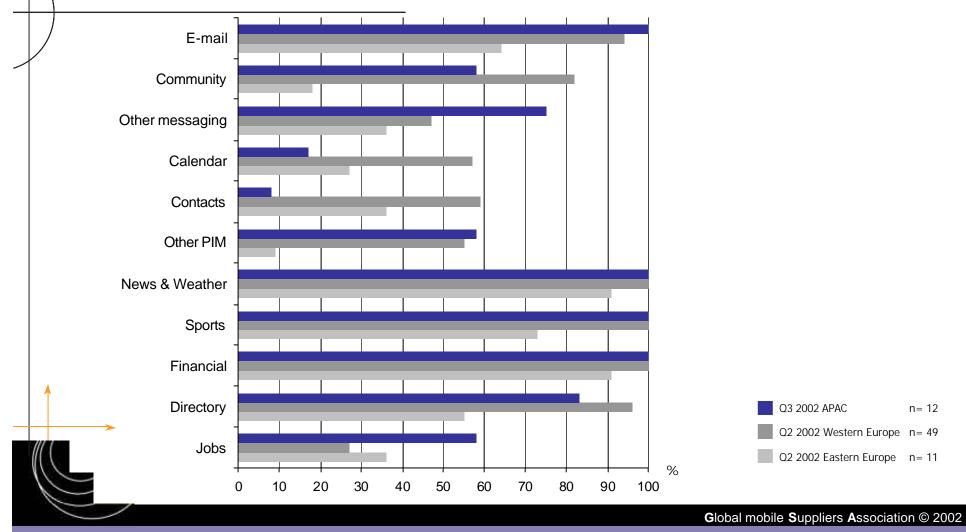




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Comparison of Messaging, PIM, Information services **APAC**, Western and Eastern Europe



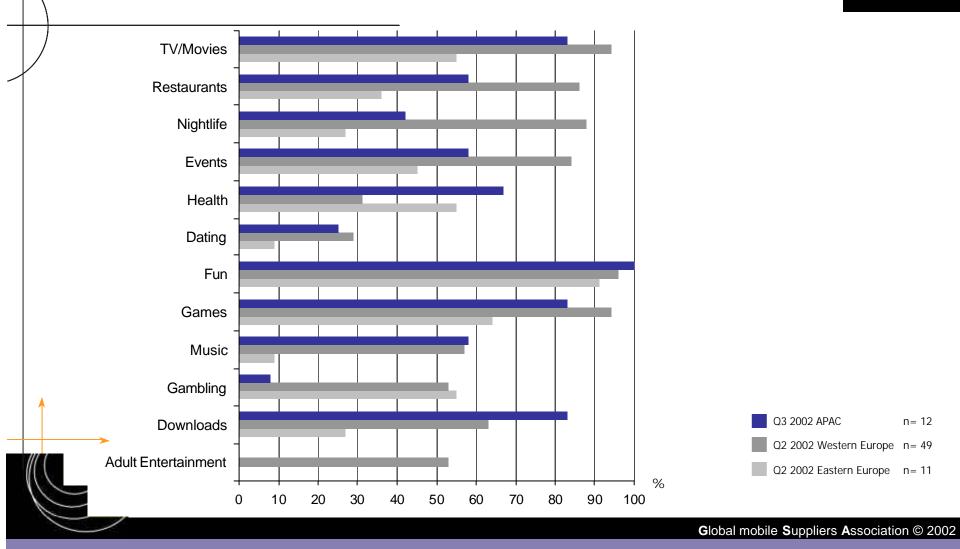


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Comparison of Lifestyle and Entertainment services APAC, Western and Eastern Europe

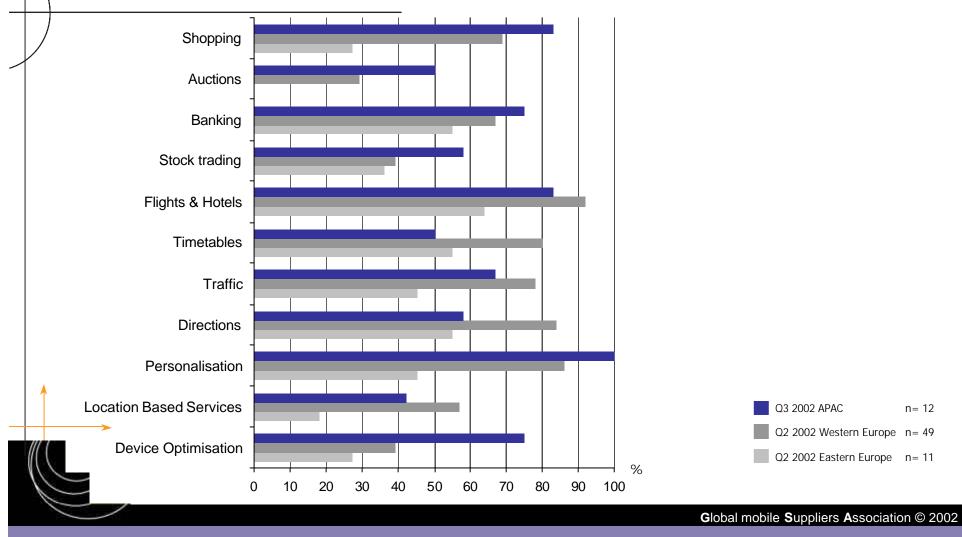




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Comparison of M-Commerce and Travel services APAC, Western and Eastern Europe





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